Abstract of the Disclosure

In fabricating semiconductor a · laser 10 with oscillation wavelength of 770 to 810 nm, impurities 5 introduced into an MQW active layer 16 near a light emitting facet of the laser to form a disordered region constituting a window layer 20. Pumped light is applied to the window layer 20 to generate photo luminescence whose wavelength λ dpl (nm) is measured. A blue shift amount λ bl (nm) is defined as the difference between the wavelength λ apl (nm) of 10 luminescence generated by application of pumped light to the active layer 16 on the one hand, and the wavelength λ dpl (nm) of photo luminescence from the window layer 20 under pumped light irradiation on the other hand. The blue shift amount λ bl 15 is referenced during the fabrication process in order to predict COD levels of semiconductor laser products.